Thomas S. Sanicola
Modine Manufacturing Company
1500 DeKoven Avenue
Racine, WI 53403

Re: Exempt Construction and Operation Status
017-11939-00031

Dear Mr. Sanicola:

The application from Modine Manufacturing Company, received on February 25, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following, to be located at 600 Water Street, Logansport, IN 46947, is classified as exempt from air pollution permit requirements:

The EGR Cleaning Line: a completely enclosed spray wash system with natural gas-fired heat input of 380,000 BTU per hour. The cleaning chemical is an alkaline cleaner that contains no volatile organic compounds.

This exemption letter is the fourth approval issued to this emission source. An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. Any change or modification which may increase the potential nitrogen oxide (NOx) emissions to 10 tons per year or more from the emission source must be approved by the Office of Air Management (OAM) pursuant to 326 IAC 2-5.5 before such change may occur.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

ARD

cc: File - Cass County
Cass County Health Department
Air Compliance Section Inspector - Ryan Hillman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	**Modine Manufacturing Company**
Source Location:	**600 Water Street, Logansport, IN 46947**
County:	**Cass**
SIC Code:	**3714**
Operation Permit No.:	**017-11939-00031**
Permit Reviewer:	**Allen Davidson**

On February 25, 2000, the Office of Air Management (OAM) received an application from Modine Manufacturing Company relating to the construction and operation of the following equipment:

(a) The EGR Cleaning Line: a completely enclosed spray wash system with natural gas-fired heat input of 380,000 BTU per hour. The cleaning chemical is an alkaline cleaner that contains no volatile organic compounds.

History

This source is an existing emission source with emissions below levels requiring a registration.

Enforcement Issues

There are no enforcement actions pending against this emission source.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
29	EGR Cleaning Line	30	1	1600	140

Recommendation

The staff recommends to the Commissioner that the construction and operation be issued an exemption. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 25, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations. (2 pages)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

The existing source potential to emit is as follows:

Pollutant	Potential To Emit (tons/year)
PM	0.2
PM-10	0.2
SO_2	0.0
VOC	7.0
CO	0.7
NO_x	1.0

The potential to emit (as defined in 326 IAC 2-7-1(29)) particulate matter (PM) and volatile organic compounds (VOC) is less than 10 tons per year. Therefore, the source does not require a registration under 326 IAC 2-5.5.

The revision's potential to emit is follows:

Pollutant	Potential To Emit (tons/year)
PM	0.0
PM-10	0.0
SO_2	0.0
VOC	0.0
CO	0.1
NO_x	0.2

The potential to emit will remain less than 10 tons per year. Therefore, the source does not require a registration under 326 IAC 2-5.5 and can be issued an exemption letter pursuant to 326 IAC 2-1.1-3.

This revision is not a major modification for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 because every attainment pollutant is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Cass County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Cass County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. This source is not subject to Subpart T (Halogenated Solvent Cleaning Operations) because it does not utilize any of the solvents or degreasing equipment specified in the rule.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source does not have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - EGR Cleaning Line

There are no state rules applicable to this facility.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed on the Office of Air Management (OAM) Part 70 Application Form GSD-08. None of the listed hazardous air pollutants will be emitted from this facility.

Conclusion

The construction and operation of this facility shall be issued the attached exemption letter, No 017-11939-00031.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Modine Manufacturing Company
Address City IN Zip: Logansport, IN 46947
Application ID: 017-11939
Plant ID: 017-00031
Reviewer: Allen R. Davidson
Date: 02/25/00

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.4	3.4

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 *see below	5.5	84.0
Potential Emission in tons/yr	0.01	0.01	0.00	0.17	0.01	0.14

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
PM emission factors are condensable and filterable.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

HAPs Emissions

Company Name: Modine Manufacturing Company
Address City IN Zip: Logansport, IN 46947
Revision: 017-11939
Plt ID: 017-00031
Reviewer: Allen R. Davidson
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HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.587E-06	2.050E-06	1.281E-04	3.075E-03	5.808E-06

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.541E-07	1.879E-06	2.391E-06	6.491E-07	3.587E-06

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.